University of Nebraska Lincoln Freshmen Engineering Majors with University of Northern Iowa Business Majors Comparisons: When do People Develop Personal Skills

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The purpose of this research is to measure the personal skills of college freshmen. A longitudinal study will follow this group to see how many new personal skills are developed before graduation. Information is being gathered on current Engineering and Business seniors so we can compare and identify the skills seniors probably developed during their studies at the university.

Our previous research on superior performers indicated they have above average job related skills in 17-23 of the 23 personal skills being measured. Therefore, data below includes freshmen students in both engineering and business majors, plus comparisons with nationally benchmarked engineering jobs.

This research can be valuable for three reasons:
1. Assist students in marketing themselves upon graduation
2. Allow the university to take credit for developing these skills
3. Provide formative assessment to strategically address skill development as a marketable component of a university program.

During the Fall of 2008, all University of Nebraska-Lincoln freshmen engineering and University of Northern Iowa business students were given the TTI Performance DNA Talent Inventory. The TTI Performance DNA system reveals the how, why and what of individual performance. This is accomplished through an assessment of the behaviors people bring to the job, the values that motivate people to do a job, and the personal skills mastery. As a job benchmarking tool, the same three areas are used to measure the requirements of the job, providing a complete system to compare talent to the position and create the best job fit. Together, TTI Performance DNA can identify, prioritize and calibrate performance criteria that will help, in this case, engineering and business students prepare to be successful in tomorrow's job market.

A pilot study, using only the behavior and values tools, was run on the 2007 incoming freshmen engineering class. With the addition of the personal soft skills inventory, this initial report will focus on this third component, the "what" of personal attributes.

Through TTI's Personal Soft Skills Inventory (PSSI), the TTI Performance DNA Talent Report describes what an individual "has done" in 23 research-based capacities of personal skills that are directly related to the work environment. Through the self-evaluation assessment of an individual's own soft skills, this quantitative measurement tool analyzes each capacity on three levels: mastery, some mastery, and not yet mastered. The assessment results define what skills an individual has exhibited in their

whole life experience by ranking the individual on a 10-point scale that reveals their strengths on the job. The top skills outlined in the report highlight individuals' well-developed capabilities and reveal the areas where they are most effective.

To help place this initial data in a context, a set of real world engineering jobs were benchmarked, thus identifying the top seven essential skills for these engineering jobs. It follows that university graduates should be developing a set of skills that match these future jobs. The following describes each of these top job-related skills and provides the present level of accomplishment by the 2008 freshmen engineering and business students. Because the first seven represent the skills required of a person "doing" the job of an engineer, they have been numbered and rank ordered. These essential competencies are followed by a non-ranked analysis of the remaining personal skills. It should be added that this is an initial report and a similar comparison to business jobs will be added and or created as a separate report.

The following data provides: the top seven engineering job essential skills, mean score comparisons and percent mastery for engineering and business college freshmen.

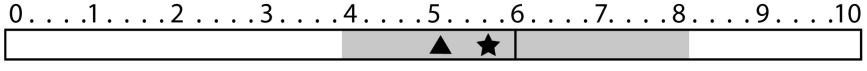
Seven Essential Competencies of a Set of Benchmarked Engineering Jobs

1. CONTINUOUS LEARNING: Taking initiative in learning and implementing new concepts, technologies and/or methods.

- Demonstrates curiosity and enthusiasm for learning.
- Takes initiative in acquiring and mastering the skills and knowledge requirements of a position.
- Keeps abreast of current or new information through reading and other learning methods.
- Actively interested in new technologies, processes and methods.
- Welcomes or seeks assignments requiring new skills and knowledge.
- Expends considerable effort and/or expense on learning.
- Genuinely enjoys learning.
- Identifies applications for knowledge.
- Is considered a knowledgeable resource by others.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	18.9%	35.0%	46.1%
Freshmen Business Students:	8.4%	37.9%	53.7%

National Mean and Standard Deviation



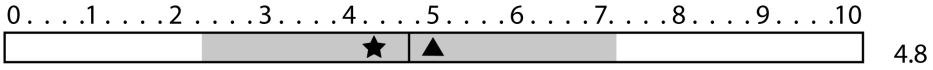
★ Engineering Student Mean: 5.63
▲ Business Student Mean: 5.10

2. PLANNING/ORGANIZING: Utilizing logical, systematic and orderly procedures to meet
objectives.

- Works effectively within established time frames and priorities.
- Utilizes logical, practical and efficient approaches.
- Prioritizes tasks for optimum productivity.
- Develops procedures, processes and systems for order, accuracy, efficiency and productivity.
- Anticipates probable effects, outcomes and risks.
- Develops contingency plans to minimize waste, error and risk.
- Allocates, adjusts and manages resources according to priorities.
- Monitors implementation of plans and makes adjustments as needed.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	7.1%	21.9%	71.0%
Freshmen Business Students:	8.9%	36.8%	54.3%

National Mean and Standard Deviation



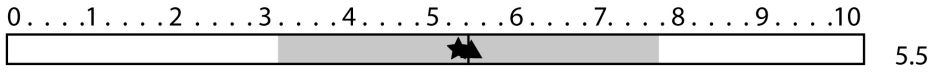
★ Engineering Student Mean: 4.31
▲ Business Student Mean: 5.01

3. PERSONAL EFFECTIVENESS: Demonstrating initiative, self-confidence, resiliency and a willingness to take responsibility for personal actions.

- Possesses unwavering confidence and belief in personal capabilities.
- Takes initiative and does what ever it takes to achieve goals.
- Projects confidence and self-assurance.
- Bounces back after setbacks.
- Asserts self in personal and professional life.
- Admits mistakes and works to avoid repeating them.
- Accepts personal responsibility for achieving personal and professional goals.
- Functions effectively and achieves results even in adverse circumstances.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	13.8%	32.7%	53.5%
Freshmen Business Students:	11.1%	44.2%	44.7%

National Mean and Standard Deviation



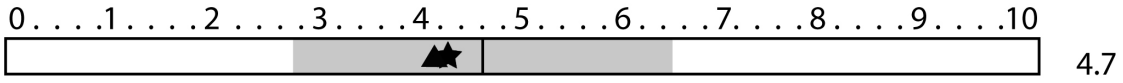
★ Engineering Student Mean: 5.31
▲ Business Student Mean: 5.52

4. ANALYTICAL PROBLEM SOLVING: Anticipating, analyzing, diagnosing, and resolving problems.

- Anticipates, identifies and resolves problems or obstacles.
- Utilizes logic and systematic processes to analyze and solve problems.
- Defines the causes, effects, impact and scope of problems.
- Identifies the multiple components of problems and their relationships.
- Prioritizes steps to solution.
- Develops criteria for optimum solutions.
- Evaluates the potential impact of possible solutions and selects the best one.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	1.60%	20.0%	78.4%
Freshmen Business Students:	.53%	14.7%	84.8%

National Mean and Standard Deviation



★ Engineering Student Mean: 4.34
▲ Business Student Mean: 4.15

5. GOAL ORIENTATION: Energetically focusing efforts on meeting a goal, mission or objective.

- Acts independently to achieve objectives without supervision.
- Expends the necessary time and effort to achieve goals.
- Recognizes and acts on opportunities to advance progress towards meeting goals.
- Establishes and works toward ambitious and challenging goals.
- Develops and implements strategies to meet objectives.
- Measures effectiveness and performance to ensure results are attained.
- Acts with a sense of urgency to achieve goals.
- Demonstrates persistence in overcoming obstacles to meet objectives.
- Takes calculated risks to achieve results.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	18.6%	32.90%	48.5%
Freshmen Business Students:	27.4%	63.95%	8.7%

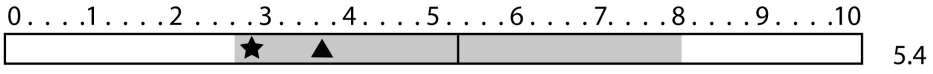
National Mean and Standard Deviation

★ Engineering Student Mean: 5.70
▲ Business Student Mean: 6.49

6. WRITTEN COMMUNICATION: Writing clearly, succinctly and understandably.
• Writes in ways that make abstract concepts, issues and information clear and understandable.
• Utilizes a wide range of appropriate writing techniques and methods.
• Succinctly presents objective or subjective viewpoints and arguments.
• Achieves communication objectives by organizing information in logical sequences that lead readers to come to natural conclusions.
• Determines what information needs to be communicated.
• Skillfully utilizes written language to convey key messages and meaning.
• Effectively involves readers in the material.
• Adjusts writing style to specific audiences as needed.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	3.9%	9.6%	86.5%
Freshmen Business Students:	5.5%	18.2%	76.3%

National Mean and Standard Deviation



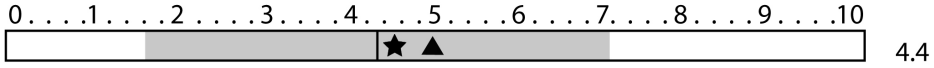
★ Engineering Student Mean: 2.83
▲ Business Student Mean: 3.67

7. SELF-MANAGEMENT (TIME AND PRIORITIES): Demonstrating self control and an ability to manage time and priorities.

- Effectively manages emotions and impulses.
- Effectively manages time and priorities to meet deadlines.
- Presents self assertively.
- Demonstrates an ability to maintain composure in the midst of crisis.
- Strives for continuous improvement.
- Balances personal and professional life.
- Takes initiative and acts without waiting for direction.
- Accepts responsibility for actions and results.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	11.3%	19.8%	68.9%
Freshmen Business Students:	15.3%	39.5%	45.2%

National Mean and Standard Deviation



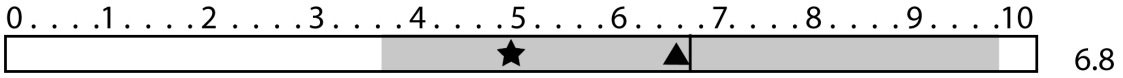
★ Engineering Student Mean: 4.45
▲ Business Student Mean: 4.99

Non-ranked Description of Remaining Personal Soft Skills

8. INTERPERSONAL SKILLS: Effectively communicating, building rapport and relating well to all kinds of people.
• Strives for self-awareness.
• Demonstrates sincere interest in others.
• Treats all people with respect, courtesy and consideration.
• Respects differences in the attitudes and perspectives of others.
• Listens, observes and strives to gain understanding of others.
• Communicates effectively.
• Sensitive to diversity issues.
• Develops and maintains relationships with many different kinds of people regardless of cultural differences.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	24.4%	22.8%	52.8%
Freshmen Business Students:	38.4%	64.7%	3.1%

National Mean and Standard Deviation

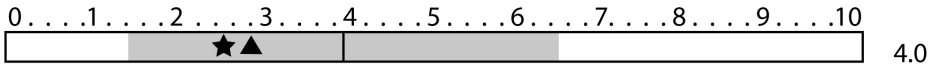


★ Engineering Student Mean: 4.92
▲ Business Student Mean: 6.37

9. DECISION MAKING: Utilizing effective processes to make decisions.
• Demonstrates an ability to make difficult decisions in a timely manner.
• Gathers relevant input and develops a rationale for making decisions.
• Evaluates the impact or consequences of decisions before making them.
• Acts decisively despite obstacles, resistance or opposition.
• Accepts consequences of decisions.
• Willing to correct erroneous decisions when necessary.
• Defends rationale for decisions when necessary.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	1.4%	5.8%	92.8%
Freshmen Business Students:	.3%	8.4%	91.3%

National Mean and Standard Deviation

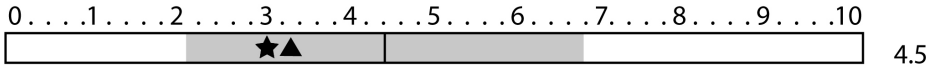


★ Engineering Student Mean: 2.51
▲ Business Student Mean: 2.83

10. FLEXIBILITY: Agility in adapting to change.
• Responds promptly to shifts in direction, priorities and schedules.
• Demonstrates agility in accepting new ideas, approaches and/or methods.
• Effective in juggling multiple priorities and tasks.
• Modifies methods or strategies to fit changing circumstances.
• Adapts personal style to work with different people.
• Maintains productivity during transitions, even in the midst of chaos.
• Embraces and/or champions change.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	1.2%	9.4%	89.4%
Freshmen Business Students:	.5%	9.0%	90.5%

National Mean and Standard Deviation

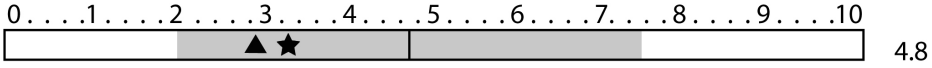


★ Engineering Student Mean: 3.05
▲ Business Student Mean: 3.33

11. CREATIVITY/INNOVATION: Adapting traditional or devising new approaches, concepts, methods, models, designs, processes, technologies and/or systems.
• Notices unique patterns, variables, processes, systems or relationships.
• Expresses non-traditional perspectives and/or novel approaches.
• Synthesizes and/or simplifies data, ideas, models, processes or systems.
• Challenges established theories, methods and/or protocols.
• Encourages and promotes creativity and innovation.
• Modifies existing concepts, methods, models, designs, processes, technologies and systems.
• Develops and tests new theories to explain or resolve complex issues.
• Applies unorthodox theories and/or methods.
• Imagines new or revolutionary concepts, methods, models, designs, processes, technology, systems, products, services or industries.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	5.5%	10.8%	83.7%
Freshmen Business Students:	.5%	10.3%	89.2%

National Mean and Standard Deviation

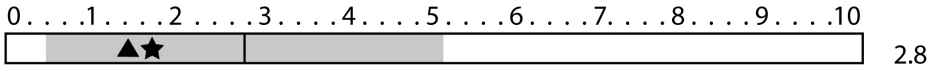


★ Engineering Student Mean: 3.29
▲ Business Student Mean: 2.86

12. FUTURISTIC THINKING: Imagining, envisioning, projecting and/or predicting what has
not yet been realized.
• Demonstrates an ability to connect the dots and see the big-picture.
• Observes and analyzes the forces driving current reality that may have long-term effects.
• Utilizes foresight and intuitive perception as well as factual events to draw inferences.
• Recognizes, supports and/or champions progressive ideas.
• Anticipates future trends or events.
• Envisions possibilities others may not.
• Imagines and/or predicts changes in current reality based on deductive and conceptual reasoning.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	.07%	2.9%	97.03%
Freshmen Business Students:	.03%	1.1%	98.60%

National Mean and Standard Deviation

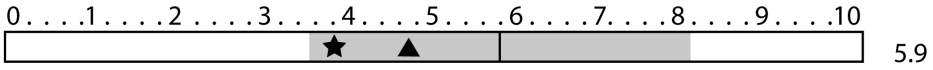


★ Engineering Student Mean: 1.71
▲ Business Student Mean: 1.43

13. DIPLOMACY: Effectively handling difficult or sensitive issues by utilizing tact, diplomacy and an understanding of organizational culture, climate and/or politics.
• Effectively utilizes tact and diplomacy in working with people across hierarchical, functional and/or cultural borders.
• Understands cultural, climate and organizational issues.
• Adapts conduct and communications to "politically correct" standards.
• Effectively leverages networks of influence to get things done.
• Is sensitive to the needs of "special interest" groups within organizations.
• Builds relationships and networks with key people of influence.
• Provides advice, counsel and mentoring on organizational issues.
• Utilizes both formal and informal networks internally to obtain support and achieve results.
• Utilizes both formal and informal networks externally to obtain support and achieve results.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	3.2%	18.0%	78.8%
Freshmen Business Students:	4.5%	24.5%	71.0%

National Mean and Standard Deviation



★ Engineering Student Mean: 3.82
▲ Business Student Mean: 4.72

14. TEAMWORK: Working effectively and productively with others.
• Respects team members and their individual perspectives.
• Makes team mission and objectives a priority.
• Works toward consensus when team decisions are required.
• Meets agreed-upon deadlines on team assignments and commitments.
• Shares responsibility with team members for successes and failures.
• Keeps team members informed regarding projects.
• Supports team decisions.
• Recognizes and appreciates the contributions of team members.
• Behaves in a manner consistent with team values and mission.
• Provides constructive feedback to team and its members.
• Responds positively to feedback from team members.
• Raises and/or confronts issues limiting team effectiveness.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	18.4%	27.4%	54.2%
Freshmen Business Students:	15.8%	50.0%	34.2%

National Mean and Standard Deviation

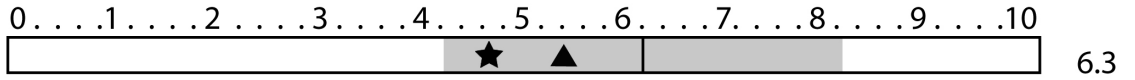
★ Engineering Student Mean: 5.34
▲ Business Student Mean: 5.88

15. CUSTOMER SERVICE: Anticipating, meeting and/or exceeding customer needs, wants and expectations.

• Strives to anticipate, identify and understand customers' wants, needs and concerns.
• Responds to customers with a sense of urgency.
• Follows through on customer requests.
• Is patient and courteous with customers.
• Resolves issues and complaints to the satisfaction of customers.
• Expends extraordinary effort to satisfy customers.
• Develops relationships with customers.
• Partners with customers to assist them in achieving their objectives.
• Acts as an advocate for customers' needs.
• Takes professional risks for the sake of customers' needs.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	9.4%	24.6%	66%
Freshmen Business Students:	11.1%	44.2%	44.7%

National Mean and Standard Deviation

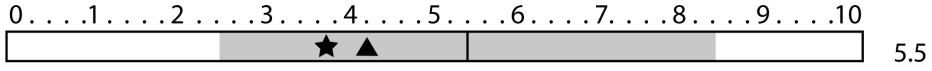


★ Engineering Student Mean: 4.64
▲ Business Student Mean: 5.42

16. PERSUASION: Convincing others to change the way they think, believe or behave.
• Utilizes the knowledge of other's needs, wants, beliefs, attitudes, and behavior to promote a concept, product or service.
• Builds trust and credibility before attempting to promote concepts, products or services.
• Understands and utilizes compliance-producing behaviors to influence others such as authority, being likeable, proof of the prior compliance of others, limited availability, sampling or giving something away to create a sense of obligation.
• Uses logic and reason to develop rational arguments that challenge current assumptions, attitudes, beliefs, and behavior.
• Identifies and addresses the social, emotional, economic, and practical barriers that prevent people from complying.
• Adapts techniques and approaches to the needs and wants of those being influenced.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	5.8%	18.9%	75.3%
Freshmen Business Students:	11.1%	27.6%	61.3%

National Mean and Standard Deviation

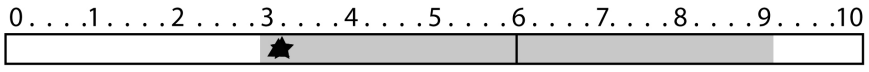


★ Engineering Student Mean: 3.69
▲ Business Student Mean: 4.21

17. PRESENTING: Communicating effectively to groups.
• Organizes information to be presented in succinct, logical sequence.
• Presents information in ways that makes abstract or complex concepts clear and understandable.
• Effectively utilizes language, word-pictures, stories, metaphors and humor.
• Utilizes a wide range of non-verbal communication or body language such as speech inflection, voice modulation, eye contact, facial expression and gestures.
• Implements a variety of visual and auditory devices to capture and invoke the audience's senses, participation and interest.
• Projects authenticity, confidence, conviction and passion.
• Appeals to and engages the heart and mind of the audience.
• Tailors presentation to the interests, needs and wants of audiences.
• Establishes and delivers content objectives.
• Communicates in ways that elevate audience awareness and understanding.
• Communicates in ways that enlighten, educate, challenge and persuade the audience to think, believe or behave in a specific way.
• Is recognized and relied upon as an effective spokesperson.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	8.8%	9.4%	81.8%
Freshmen Business Students:	9.7%	18.9%	71.4%

National Mean and Standard Deviation

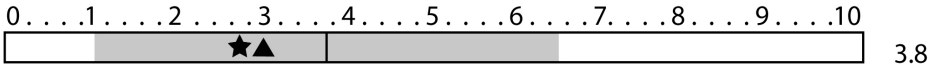


★ Engineering Student Mean: 3.18
▲ Business Student Mean: 3.14

18. NEGOTIATION: Facilitating agreements between two or more parties.
• Understands both parties must get something they want before agreement is feasible.
• Listens to identify and understand what each party wants.
• Determines what each party is willing to accept in an agreement.
• Establishes a non-threatening environment, conducive to open communication for discussing possible terms of agreement.
• Develops the terms for an agreement.
• Ensures each party understands the terms of agreement.
• Binds agreements between parties with verbal and/or written contracts.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	1.2%	10.6%	88.2%
Freshmen Business Students:	3.2%	11.0%	85.8%

National Mean and Standard Deviation

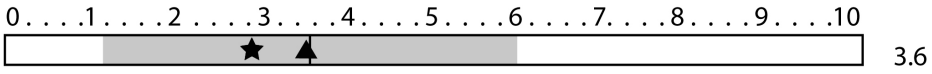


★ Engineering Student Mean: 2.70
▲ Business Student Mean: 2.98

19. EMPATHY: Identifying with and caring about others.
• Demonstrates genuine concern for others.
• Respects and values people.
• Perceives and is sensitive to the emotions people experience.
• Expends considerable effort to understand the real needs, concerns and feelings of others.
• Advocates for the interests, needs and wants of others.
• Demonstrates cross-cultural sensitivity and understanding.
• Takes personal and/or professional risks for the sake of others.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	3.2%	11.1%	85.7%
Freshmen Business Students:	2.4%	15.3%	82.3%

National Mean and Standard Deviation

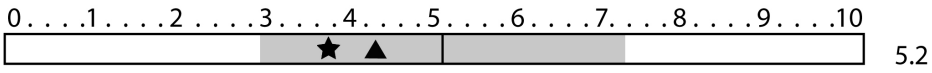


★ Engineering Student Mean: 2.83
▲ Business Student Mean: 3.25

20. CONFLICT MANAGEMENT: Addressing and resolving conflict constructively.
• Readily identifies and addresses issues, concerns or conflicts.
• Recognizes opportunities for positive outcomes in conflict situations.
• Reads situations quickly and accurately to pinpoint critical issues.
• Listens to gain understanding of an issue from different perspectives.
• Diffuses tension and effectively handles emotional situations.
• Assists people in adversarial positions to identify common interests.
• Strives to settle differences equitably.
• Settles differences without damaging relationships.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	2.8%	13.4%	83.8%
Freshmen Business Students:	3.4%	17.4%	79.2%

National Mean and Standard Deviation

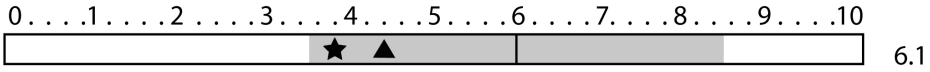


★ Engineering Student Mean: 3.74
▲ Business Student Mean: 4.34

21. LEADERSHIP: Achieving extraordinary business results through people.
• Inspires others with compelling visions.
• Takes risks for the sake of principles, values or mission.
• Builds trust and demonstrates integrity with a noticeable congruence between words and actions (walks their talk).
• Demonstrates optimism and positive expectations of others.
• Delegates appropriate responsibilities and authority.
• Involves people in decisions that affect them.
• Addresses performance issues promptly, fairly and consistently.
• Adapts methods and approaches to the needs and motivations of others.
• Makes decisions to avoid or mitigate the negative consequences for people.
• Demonstrates loyalty to constituents.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	8.3%	17.7%	74.0%
Freshmen Business Students:	7.9%	30.0%	62.1%

National Mean and Standard Deviation



★ Engineering Student Mean: 3.78
▲ Business Student Mean: 4.42

22. MANAGEMENT: Achieving extraordinary results through effective management of resources, systems and processes.

- Takes risks for the sake of goals, objectives or results.
- Demonstrates optimism and positive expectations of others.
- Establishes high performance standards.
- Holds people accountable and focused on goals and priorities.
- Identifies barriers to objectives and removes them.
- Delegates appropriate responsibilities and authority.
- Ensures adequate resources are available to achieve objectives.
- Makes decisions that benefit the bottom line or return on investment.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	9.2%	27.4%	63.4%
Freshmen Business Students:	8.4%	41.8%	49.8%

National Mean and Standard Deviation

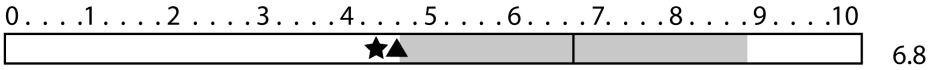
★ Engineering Student Mean: 5.08
▲ Business Student Mean: 5.57

23. EMPLOYEE DEVELOPMENT/COACHING: Facilitating and supporting the professional growth of others.

- Expresses confidence in others' ability to perform.
- Identifies developmental needs.
- Encourages initiative and improvement.
- Provides opportunities for training.
- Gives new, difficult and/or challenging work assignments.
- Acknowledges and praises improvements.
- Trains, coaches and mentors others to develop.
- Views mistakes as opportunities for learning.
- Promotes learning and growth.

	Mastery	Some Mastery	Not Yet Mastered
Freshmen Engineering Students:	6.9%	20.7%	72.4%
Freshmen Business Students:	4.5%	24.8%	70.7%

National Mean and Standard Deviation



★ Engineering Student Mean: 4.36
▲ Business Student Mean: 4.60

Mastery Summary

Freshmen Business Student Average		Freshmen Engineering Student Average	
Full mastery	1.97%	Full mastery	1.86%
Some mastery	6.54%	Some mastery	6.32%
Full & some mastery	8.51%	Full & some mastery	8.18%

Discussion

As national trends, such as the drive for 21st century skills, strive for more focus on these essential personal attributes, developmental programs must move beyond assuming that their constituents leave with required skills, to documenting both the product and the process. With the initiation of these data collections, the Colleges of Engineering and Business are positioning themselves to be national leaders. But what does any of this initial data mean and what should these colleges do as a result of this information?

At first glance one might draw the conclusion that the incoming freshmen are lacking in not some, but all 23 personal attributes surveyed. They are below national means and their mastery, with few exceptions, as a group, is extremely low. But please keep in mind that they are being compared to a national workforce mean and not other first year college students. Nebraska's College of Engineering was one of the first programs in the nation to gather this data. So comparison to similar groupings is nearly impossible. More importantly, while documenting student entry levels is useful, what is crucial is identifying what skills our students gain as a result of their programs of study. I might add that each division of engineering and business may have somewhat different job-related soft skill requirements. So down the road we may also want to identify the specific personal attributes that each program area plans to develop and then collect data for documentation. It is this growth and the identification of what specific experiences lead to these soft skills development that will inform our programs and contribute to both formative and summary assessments.

What Next

It is recommended that comparison data from graduating seniors be collected using the same tools and process that has been employed for the past two years with incoming engineering freshmen. Notes taken during our initial fall meeting identified a small group of fall graduates of around a dozen students that were surveyed this semester and the remaining seniors could and should be surveyed during the spring of 2009. This data would allow the College of Engineering to at least see how their students may have changed during their undergraduate experience. A similar approach is recommended for the UNI College of Business.

In addition, we would like to work with the College Retention Offices to develop a follow-up survey to be used to begin to identify where and how students are gaining these specific soft skills. For example, 4 out of the over 400 freshmen engineering students have mastered 10 or more of the 23 soft skills. What led to this accomplishment? A short online questionnaire, or in some cases a phone interview, might provide additional information that would not only help identify where these skills are derived, but may down the road help with student selection. Questions to be considered include:

- What activities did students participate in as part of their high school experience?
- What summer jobs have they had and what were their responsibilities?
- What organizations have they belonged to and what roles did they play in that organization?
- What was the size of their home community?

- What are their parents' jobs?
- What is the size of their high school graduating class?

Concluding Comment

The research team wants to personally thank the College of Engineering for their vision in recognizing the need for this program addition. While others are gathering forces to move in similar directions, the UNL program is taking the lead. I can see in the future how this information will play an important role in program certification, student selection and retention, student job placement, improved letters of recommendation and resumes, and an expanded definition and pride in our graduates' accomplishments.